
U.S.S. SARATOGA
NOVEMBER 1979
U.S.S. RANGER
CLOSE COVER BEFORE STRIKING MATCH
U. S. Navy
U.S. COAST GUARD AIR STATION
BROOKLYN, NEW YORK
CLOSE COVER BEFORE STRIKING MATCH
U.S.S. YORKTOWN
CLOSE COVER BEFORE STRIKING MATCH
SCOUTING SQUADRON 42
U.S. NAVY
PATROL SQUADRON
naval aviation
U.S.S. WASP

Covers — Wraparound cover was designed by NANews' Charles Cooney using a rare collection of vintage matchbooks kindly submitted by retired Naval Aviator, Captain Bill Scarborough. The matchbooks feature various squadrons, ships, and air stations from another time in Naval Aviation. Here, in this 1970 picture by PH3 L.J. Lafeir, USS America plows the seas.

naval aviation news

SIXTY-FIRST YEAR OF PUBLICATION

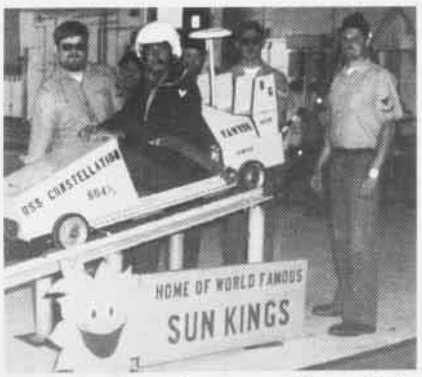
Vice Admiral W. L. McDonald
Deputy Chief of Naval Operations (Air Warfare)
Vice Admiral F. S. Petersen
Commander, Naval Air Systems Command

STAFF

Captain Ted Wilbur	Head, Aviation Periodicals and History
Cdr. Rosario Rausa	Editor
Charles C. Cooney	Art Director
JOCS Bill Bearden **Helen F. Collins**	Associate Editors
Sandy Nye	Assistant Editor
Cdr. Chuck Sammons	Contributing Editor
Harold Andrews	Technical Advisor

EDITOR'S CORNER

OK #3. The *Sun Kings* of VAW-116 stole the show last May at the Navy California Jubilee with their ramp-launched, tailhook-equipped car. The event was held at the Coronado Amphibious Base in San Diego. The vehicle, sponsored by the NAS Miramar Officers Wives Club, won the

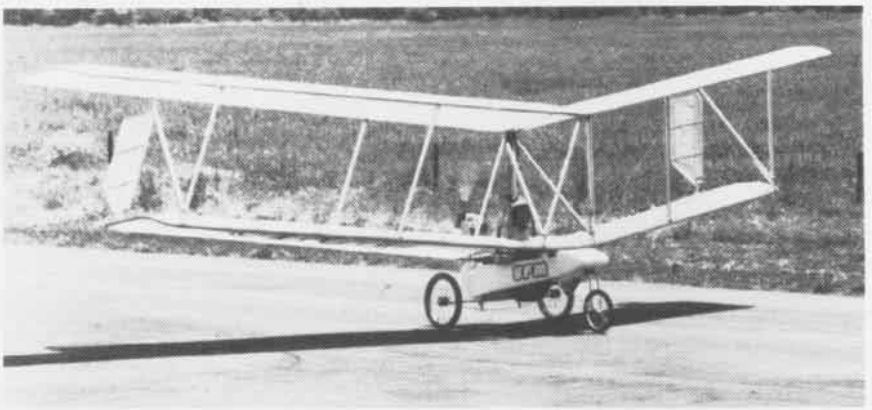


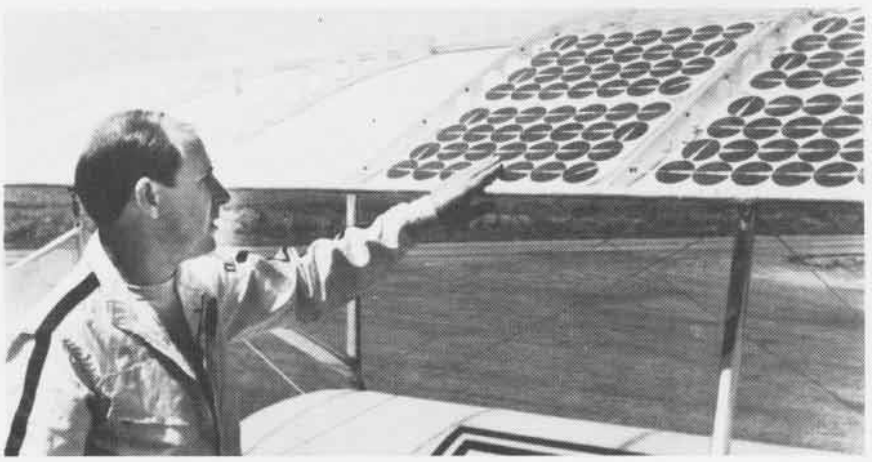
Best Game Booth prize. Object of the game was to launch and attempt to catch a wire as the car hurtled down the ramp. Builders of the Sun King Special were, left to right, AMH3 Gary Cantrell, AMH1 Mansueto Claro, AMS1 Brent Nicholl, AMS3s Jesus Duran and Edward Cori and, seated for a ride, AMH3 Russell Long. Proceeds from the Jubilee were donated to Navy Relief.

The Numbers Game. From the May/June issue of *Douglas Service,* published by McDonnell Douglas Corporation: "A DC-9 takes off or lands every seven seconds worldwide, all day, seven days per week, serving 574 cities with 6,359 daily flights. . . . These figures take on added significance when viewed in relation to the average flight length — 45 minutes — and the number of DC-9s in service around the world — nearly 900 — flown by 53 operators. To date, the DC-9 family has carried more than 1 billion passengers, has accumulated more than 18 million flying hours. . . . Some DC-9s have accumulated more than 35,000 hours of flight time and more than 300 have flown 24,000 hours or more." The Navy flies the C-9B *Skytrain II* on logistics missions.

Solar Riser. Larry Mauro is president of Ultralight Flying Machines in Santa Clara, Calif. On April 29 of this year, at the Flabob Airport in Riverside, he entered the record books by achieving the first manned, solar-powered flight. Builder and designer, as well as pilot, of the biplane he calls *Solar Riser,* Mauro launched at noon, remained aloft for one and a half minutes, reached 30 to 40 feet of altitude and traveled a half mile through the air. His speed was about 20-24 miles per hour. In the photos, Larry taxies, and examines some of his aircraft's 500 solar cells. By way of a three-horsepower electric motor, they drive a rear-mounted prop, 41 inches in diameter. A former team mechanic for Ferrari, Mauro said of his *Solar Riser,* "I visualize people using this to commute to work someday. It's quiet and non-polluting. We have the solar power and engineers to develop it."

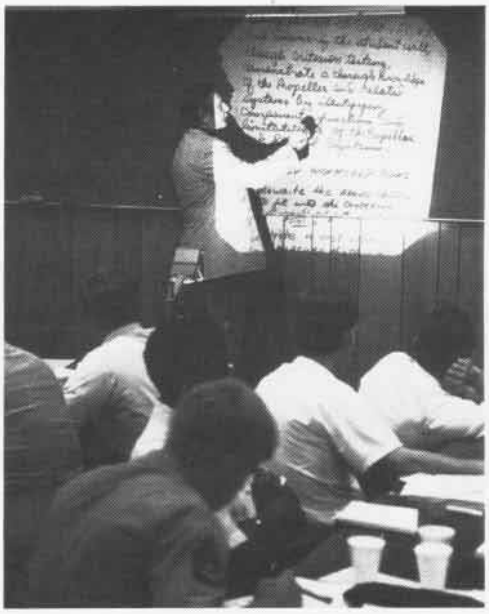
Fighter Aces. *The American Fighter Aces Album* of the American Fighter Aces Association is in print. It contains a foreword by Senator Barry Goldwater, a history of the association, and is packed with action biographies and pictures of flying aces. The handsome volume is available at $30 per copy, postpaid, from Mr. William N. Hess, Recording Secretary, P.O. Box 61268, Houston, Texas 77208.





DID YOU KNOW?

Training Courses



In order to keep up with rapidly changing aviation equipment, the Naval Air Maintenance Training Group at NAS Memphis has begun a program to streamline curriculum development. It calls for teaching former instructor personnel the fine points of developing training course curricula. The result is better instruction for aviation maintenance personnel designed to make them instructional systems design (ISD) specialists.

Working 12-hour days, 23 new ISD specialists spent one week at NAMTraGru headquarters learning how to develop a course curriculum. Located at various NAMTraDets around the country, the specialists will provide on-site development of training courses. The Group headquarters will conduct the final review, but the nuts and bolts of course development will be accomplished at the training site.

"Rapidly changing aviation technology has placed a huge burden on the training command," said Captain E. O. Williams, NAMTraGru C.O. "We have to train personnel quickly and thoroughly, particularly in the aviation field where the safety factor is so important. We must be able to develop a training course for a new piece of equipment or type of aircraft, implement the course in the shortest possible time, and still maintain high quality training."

The key to the new system is direct input from user activities during the development process. The teamwork of the training user and the ISD specialist will produce a comprehensive curriculum, requiring little revision, once implemented. Standardization of the course development process will result in more uniform training in the 49 NAMTraDets coast to coast. "The best training for the most people in the least time at minimum cost."

Helo Night Vision

NATC Patuxent River is investigating helicopter night vision devices to improve the operational capabilities of Marine Corps CH-46s and CH-53s in darkness or reduced visibility. Two of the alternatives being explored by the Rotary Wing Aircraft Test Directorate are forward looking infrared (FLIR) devices and night vision goggles.

The goggles are binocular-type devices which provide light amplification when worn by the flight crew. They were originally designed for ground troops and are currently being used by Army aviation units. If they are employed in Marine Corps helicopters, minor cockpit modifications will be needed to ensure maximum combat effectiveness.

The FLIR system will probably take the form of a panel-mounted display with associated controls which will enable the pilot to scan flight paths and prospective landing zones. Although the system is being used in several

DID YOU KNOW?

fixed-wing aircraft and some Air Force helicopters, development of FLIR for the Marine Corps transport helicopter fleet must undergo more test and evaluation before being available for tactical units.

Aviation Hall of Fame

Four outstanding aviation pioneers recently joined the 80 already enshrined in the Aviation Hall of Fame. The ceremonies took place in Dayton, Ohio, on July 21, emceed by CBS news correspondent Harry Reasoner.

Honored were: Neil A. Armstrong, a former Naval Aviator who became a NASA astronaut and was the first person to step on the moon; Sherman M. Fairchild, whose interest in cameras led to the aerial mapping industry and whose business enterprises covered the fields of communication, aeronautics and astronautics; Charles F. Kettering, an inventor who helped perfect ignition systems and eliminate the knock in internal aircraft combustion engines through additives to gasoline, and who also created one of the first guided missiles; and Anne Morrow Lindbergh who helped pioneer the Great Circle commercial airline routes to the Orient and Europe and, with her husband, Charles A. Lindbergh, embarked on a remarkable series of adventures in the air.

One of the objectives of the Aviation Hall of Fame is to bring outstanding achievements in aviation and space to the attention of today's generation of Americans.

AV-8B Progress Report

Prototype demonstration of the Marine Corps YAV-8B light attack aircraft has been completed. The two prototype aircraft were returned to the contractor, McDonnell Douglas, in St. Louis for changes to flight test instrumentation before further development flights at St. Louis and NATC Patuxent River. McDonnell Douglas has begun preparations for full-scale development, with British Aerospace as major subcontractor and Rolls-Royce as manufacturer of the Pegasus II vectored-thrust engine.

The AV-8B is designed to significantly improve the payload and radius of the AV-8A without increasing the engine thrust. The improvement has been achieved by including high-lift devices on the fuselage, redesigning engine nozzles and intakes, and developing a new wing. The latter – wingskins and main structure – is made of graphite epoxy composite material. The YAV-8Bs were the first aircraft to fly with a composite wing. The material is strong and lightweight, does not corrode, and has a long life.

The production aircraft will have a forward fuselage which positions the pilot higher for better visibility, provides additional space for high-technology avionic equipment, and will be made from graphite epoxy composite material. The AV-8B is scheduled to make its first flight in October 1981.

Orville Wright Award

The Orville Wright Achievement Award has been presented to 1st Lt. Ray M. Rapert, VMGR-252, for superior flight and academic excellence during pilot training at Pensacola, August 1 through December 31, 1978. His basic and advance flight training averages were 3.21 and 3.14 on a 4.00 scale, and his final overall average was 64.02 out of a possible 80.00.

The semi-annual award recognizes graduates of military pilot training classes for leadership, academic achievement and flying ability. It is sponsored by the Order of Daedalians whose objective is to perpetuate a high degree of patriotism and love of country.

Hornet Test-bed

A modified Navy T-39 *Sabreliner* is serving as a flying test-bed for the F/A-18A strike fighter's radar. Aboard the Rockwell *Sabreliner* are the *Hornet's* APG-65 radar, mission computer, displays and inertial navigation systems, which form the core of the *Hornet's* airborne electronics or avionics ability.

A Navy preliminary evaluation was completed in July at the McDonnell Aircraft Division in St. Louis. Radar and avionics integration has received 70 hours of testing aboard the T-39. Most test flights last about 90 minutes and include three or four intercepts, both long-range and close-in. Various radar modes, including real-beam, doppler-beam and mapping, are evaluated during return flights. The *Sabreliner* usually takes off with a four-man crew including the pilot, radar operator and two engineers.

McDonnell Douglas is building the F/A-18 for the Navy and Marine Corps. Five development *Hornets* are flying in St. Louis and at NATC Patuxent River.

New LAMPS Helo

The first Navy SH-60B *Seahawk* prototype is scheduled to make its maiden flight in mid-December at Sikorsky's Development Flight Center, West Palm Beach, Fla. It is one of five pre-production prototype aircraft being built by Sikorsky for the Navy. Another will have no avionics aboard and will be used strictly for ground testing.

When the SH-60B enters the fleet in the 1980s, it will perform its LAMPS mission, operating from destroyers, frigates and cruisers – detecting, classifying, locating and "destroying" hostile ships and submarines over extended ranges. Its secondary missions will include search and rescue, medical evacuation and general fleet support.

Grampaw Pettibone

Snow Job

The P-3A landed at NAS Northeast shortly before noon in January following a 3.2-hour flight after an RON at Southern AFB, Fla. The crew was released from ditching stations after clearing the duty runway. Four of the six members went forward to the flight station. The PPC elected to keep all four engines on the line at normal rpm to aid in taxiing on the snow-and-ice-covered surface. The top layer of snow on the taxiway and ramp had melted into slush, permitting effective directional control with a combination of nosewheel steering and asymmetric power.

The pilot made a turn from the taxiway onto the ramp entrance without difficulty. He determined that sufficient clearance existed for taxi between a large snowbank on the port side and a parked aircraft on the starboard. During taxi through the area, the nosewheel steering handle was jerked out of the pilot's hand as the aircraft lurched to port, apparently due to the nosewheel falling into a frozen rut (or the prop digging into a snowbank).

Looking out his port window, the pilot noticed that the #1 prop was in the snowbank. He directed that it be feathered and pulled the "E" handle (emergency engine shutdown) himself. The prop started to feather. Almost immediately the #1 prop and gear box separated from the engine and came to rest 100 feet to the starboard side of the aircraft, after striking the #2 engine nacelle and prop, the port fuselage just forward of the radioman's station, and the flight station overhead hatch, causing it to fold in violently.

The #2 prop and gear box departed the engine after being struck by the #1 prop and gear box. A blade from the #2 prop entered the port fuselage just aft of the radio compartment and sliced its way entirely through the fuselage, coming to rest in an electronics bay on the starboard side of the aircraft. The rest of the #2 prop fell in the snowbank forward of the wing between #1 and #2 engines.

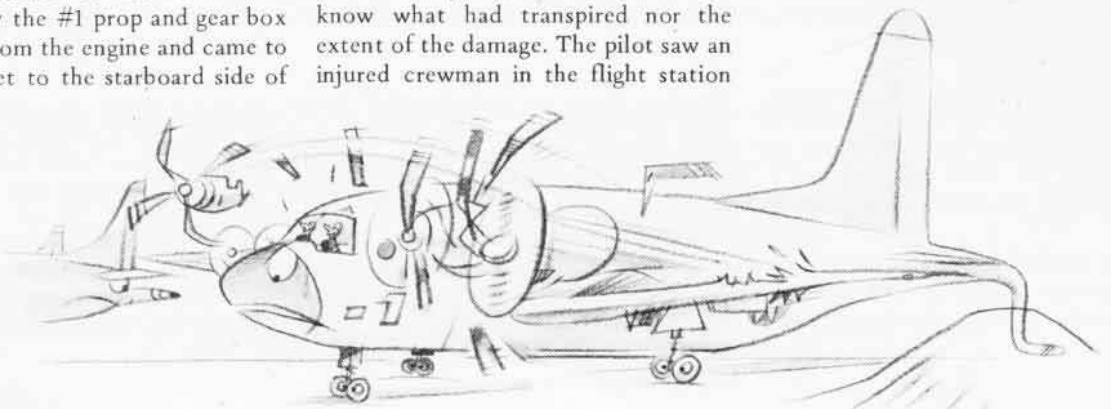
At this point, the crew did not know what had transpired nor the extent of the damage. The pilot saw an injured crewman in the flight station and made an emergency radio transmission just prior to shutting down the #2 engine. The crewman had been struck by the flight station overhead hatch when it was forced inward by impact from the #1 propeller. Unconscious for several seconds, the crewman was eventually able to depart the aircraft, with assistance from others, through the main cabin door.

Difficulty was encountered in getting the exit ladder positioned due to the snowbank. The exiting crew carefully avoided a fire which was engulfing the #1 engine. Fortunately, the fire was promptly extinguished by the NAS crash crew.

Grampaw Pettibone says:

Great sufferin' snowbanks! A highly experienced aviator, as this one was, shoulda known better than to fool Mother Nature, or snow Old Man Winter. This flyer let get-home-itis, complacency and disregard for standing instructions overshadow good judgment in attempting to taxi through a hazardous, obstructed area without assistance. Failure to request assistance resulted in significant damage to the aircraft and nearly cost the life of a crew member. A whirling prop slicing through a congested crew compartment is "too close a shave."

The seemingly insignificant decision, "I can get through there," under such circumstances, can, and often does, lead to some awfully significant incisions. This one really frosted Old Gramps' whiskers.



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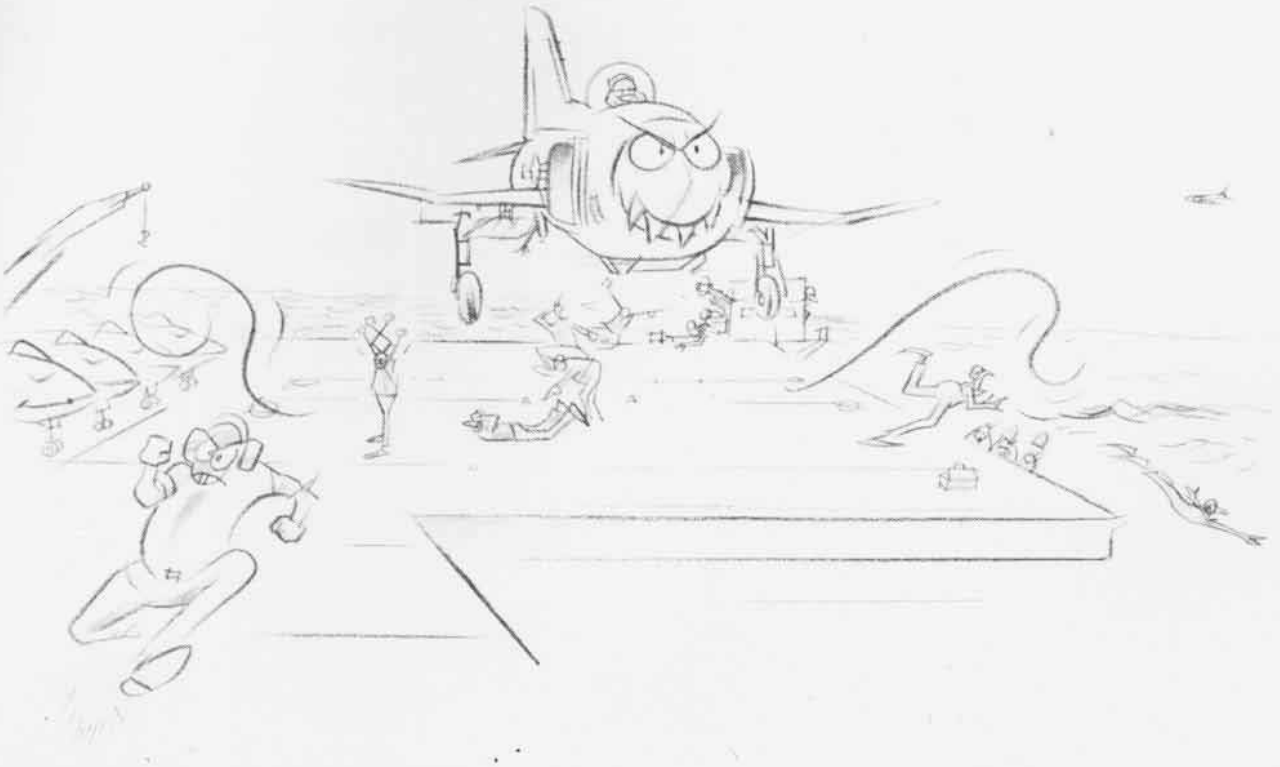

No Room to Assume

"In the groove, do you have a ball?"

"Cobra 112, *Phantom* ball, state 4.3."

"Roger Ball."

The carqual evolution continued. Then over the flight-deck SRC-22VFH headphone circuit came a call of "Foul deck! Foul deck!" from the arresting gear officer (AGO). He had observed a cable support malfunction during arresting cable retract. The air boss, hearing the foul-deck call, turned to switch the aft rotating beacon from green to red – to "close" the deck. Two flight deck crewmen ran into the landing area to inspect the arresting cable and repair the malfunctioning cable support bracket as an F-4, which had just landed, taxied clear of the landing area. The arresting gear maintenance officer, running aft to supervise the wire support repair, observed the AGO in the landing area with his outstretched arms crossed overhead – indicating a foul deck.

"Roger Ball," – acknowledged the controlling LSO. Cobra 112 appeared on the center line, wings level, with two men visible in the landing area.

"That's good...now hold it up there ... a little more power."

"Right for lineup," called the backup LSO, as the incoming F-4 neared the ramp.

"Bolter! Bolter! Bolter!" called the LSO as the *Phantom* landed. The arresting hook skipped the #3 wire but picked up #4. The *Phantom* slowed somewhat, then, with throttles at full power, became airborne after the #4 arresting cable parted and whipped violently across the deck. Miraculously, no one was injured by the cable. The pilot assessed the situation and diverted his slightly damaged aircraft to a safe landing at a shore base.

Grampaw Pettibone says:

Holy assassinating assumptions! This is enough to make grown men cry, or even worse, die. It was more than miraculous that no one was injured in this foul deck fiasco. This incident illustrates the potentially catastrophic results that can occur when well-trained and qualified members of the carrier aviation team "assume" things other than their responsibilities.

The LSOs, directing their attention to the approaching aircraft, assumed the deck to be clear. They failed to observe the men in the landing area and assumed someone would tell them (the LSOs) if the deck were foul. The LSO phone-talker assumed the LSOs heard his repeated foul deck calls. The air boss assumed that the LSOs knew the deck was foul and assumed they would wave-off the approaching F-4 since there was no chance for landing. He diverted his attention from watching the deck to getting more aircraft into the pattern, and failed to announce "foul deck" over the flight deck 5mc loudspeaker circuit.

The two wire-check crewmen directed all their attention to repairing the wire support, with no one "hawking" approaching aircraft. They assumed someone would warn them of impending danger. Fortunately, one of them spotted the landing F-4 in the nick of time and they fled the landing area as the aircraft passed over them.

Too many assumptions here! It seems to old Gramps that we go through some variation of this disaster almost annually. Fortunately, on this occasion the grim reaper missed his mark. But you can be dang sure he'll return when we least assume that he will.


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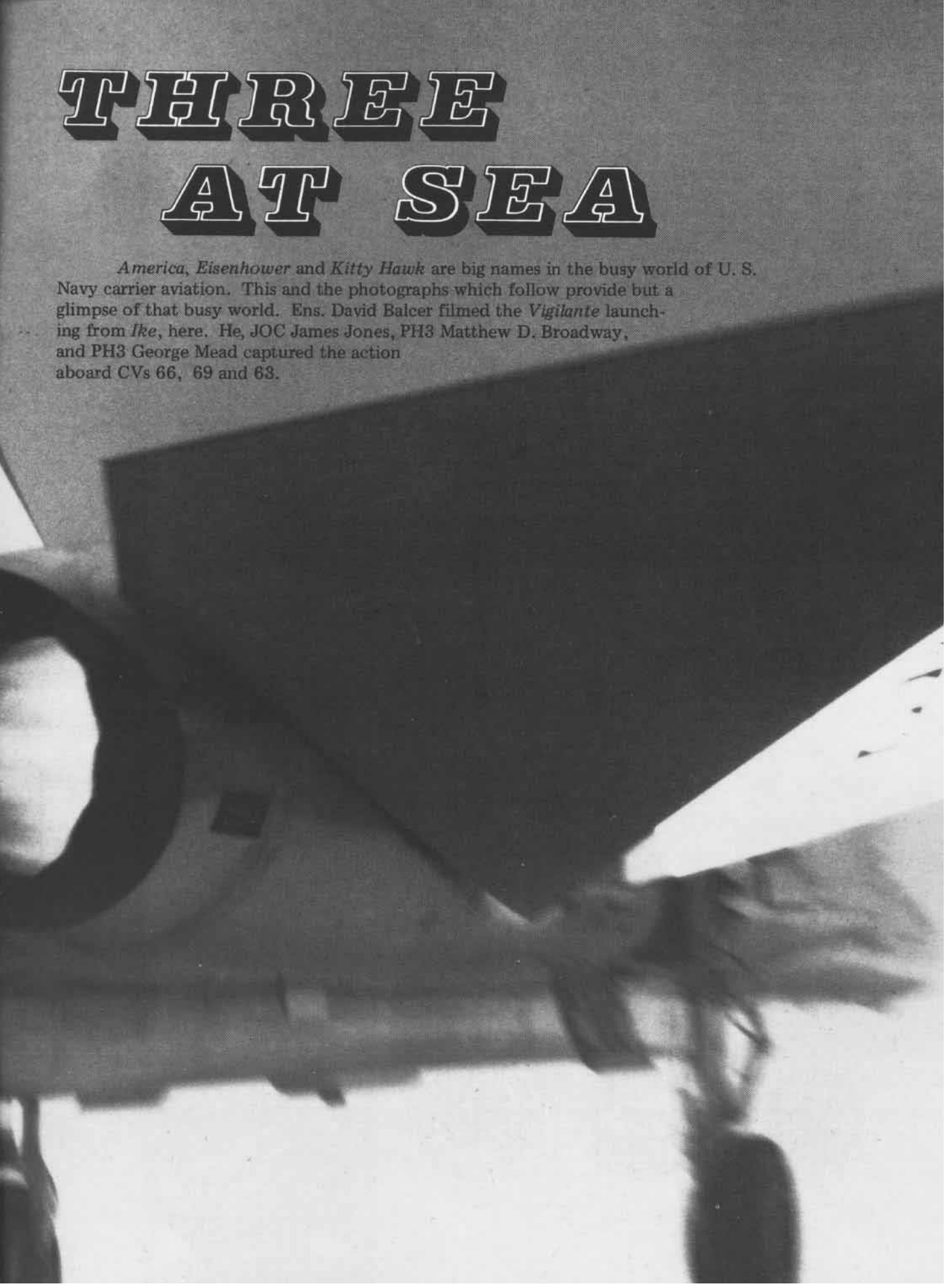
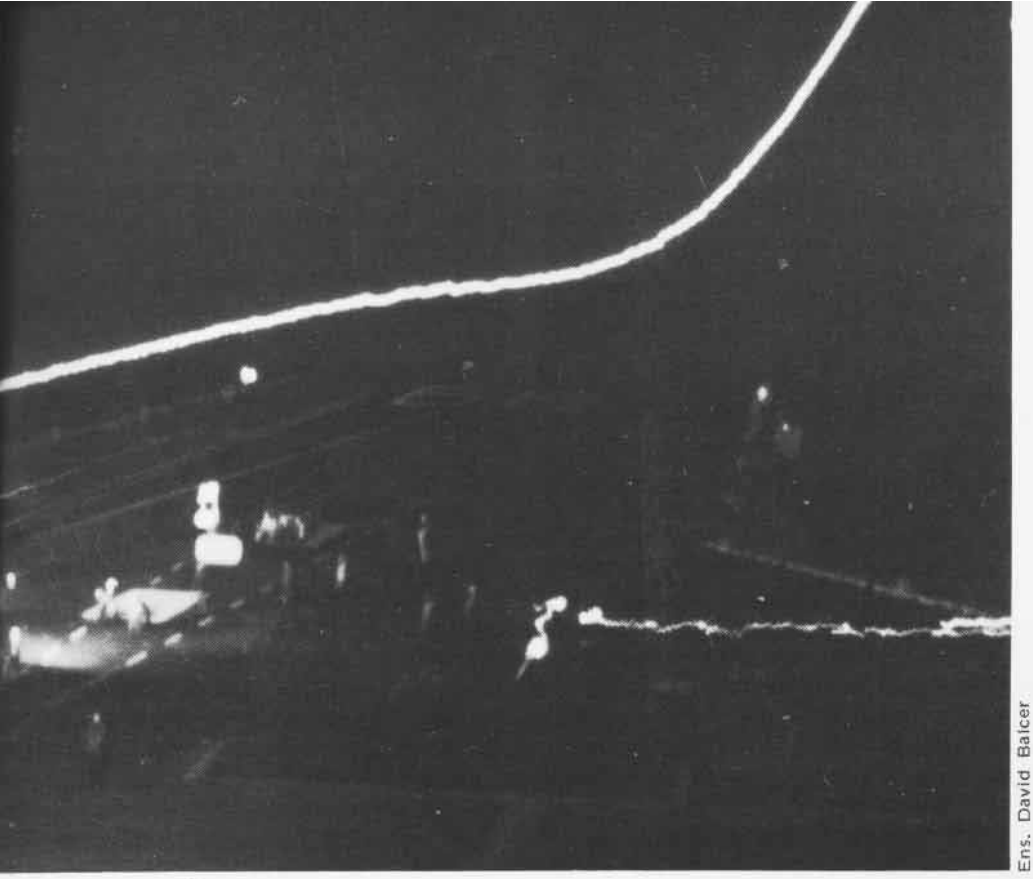
THREE AT SEA

America, *Eisenhower* and *Kitty Hawk* are big names in the busy world of U. S. Navy carrier aviation. This and the photographs which follow provide but a glimpse of that busy world. Ens. David Balcer filmed the *Vigilante* launching from *Ike*, here. He, JOC James Jones, PH3 Matthew D. Broadway, and PH3 George Mead captured the action aboard CVs 66, 69 and 63.



Different perspectives of day and night takeoffs are reflected in the scenes aboard America. Opposite, a C-1 Trader approaches the wires on Eisenhower. Below, wearing cumbersome tie-down chains, are plane captains, the unsung heroes of the flattops, waiting for their birds to come home to CV-66.

JOC James Jones



Ens. David Balcer

Ens. David Balcer

Ens. David Balcer

Corsair IIs are aligned in the mist on America's bow.

JOC James Jones

JOC James Jones

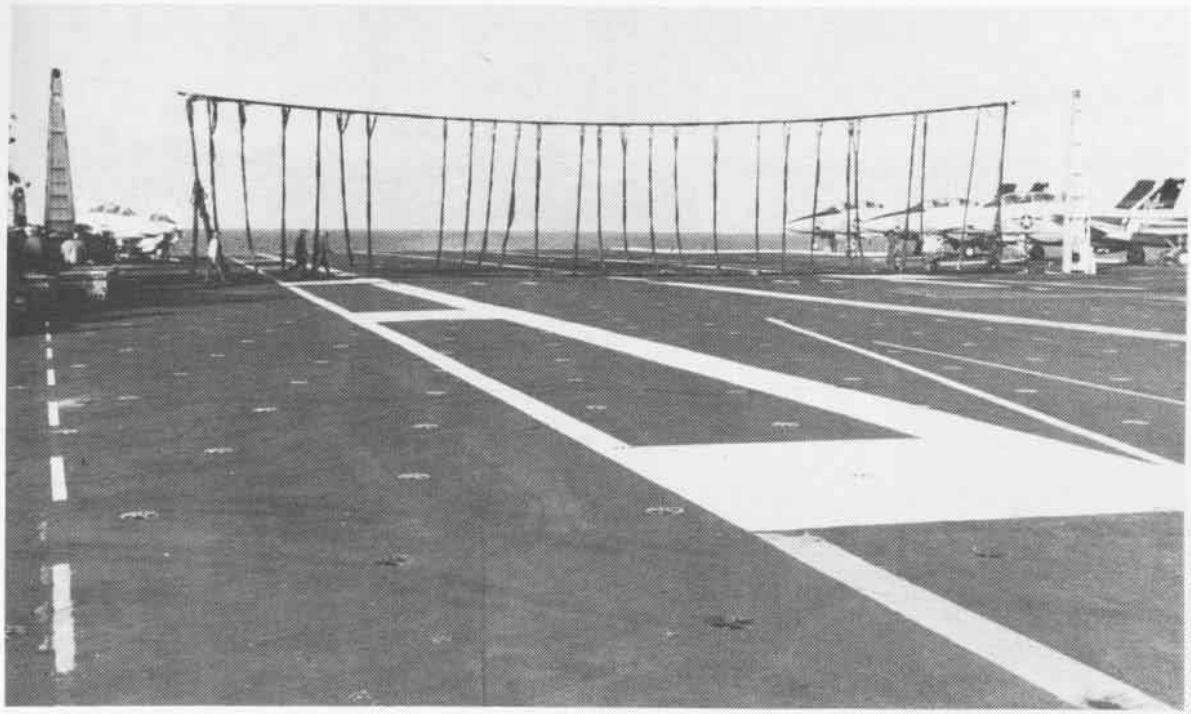
On America: a maintenance crewman examines upper portion of an aircraft during preflight; a VF-171 Phantom is readied on the catapult and an HC-2 Sea King stands by.

Ens. David Balcer

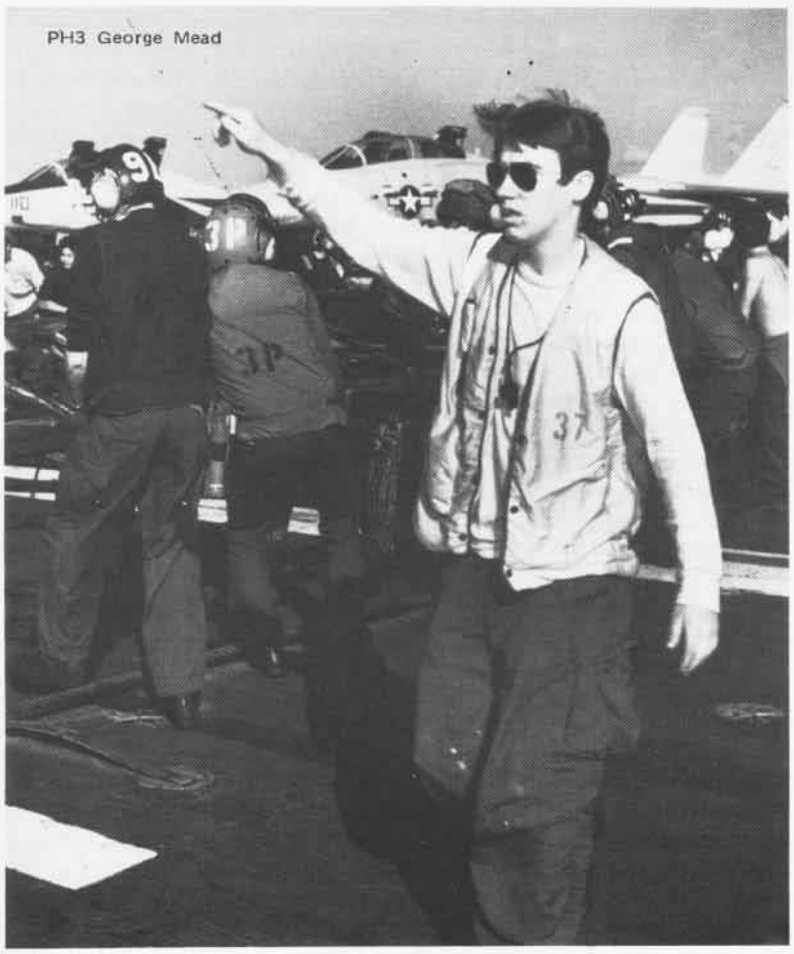
Ens. David Balcer

Ens. David Balcer

PH3 Matthew Broadway



PH3 Matthew Broadway



PH3 George Mead

VAW-122 Hawkeye launches from Eisenhower, opposite, top. In other pictures, Kitty Hawk flight deck crew practices rigging the barricade, a critical evolution which has to be completed in a hurry in order for an aircraft with landing equipment problems to get aboard safely.

SKY

By Ltjg. Douglas Campbell

Photographs taken from the air, as well as the aircraft, cameras and men that make aerial photography possible, are of special interest to more than just those connected with aviation. Aerial photographs permanently record what pilots and others who fly have seen or done in the course of their duties. Their views, as seen through the lenses of their cameras, are a source of envy for those who have their feet firmly planted on the ground.

In the early days of aerial photography, cameras were mostly fitted in cradles and suspended over holes cut out of the floor of the aircraft's fuselage. Most cameras, however, were designed to be held by hand, and the unfortunate photographer had to lean out over the side.

William Jennings, who shot the first American photographs from a drifting balloon in 1880, was prompted to write in the January 1912 edition of *Literary Digest*, "Should the sky operator lean far enough over the hood of his Graflex to view the image on the ground, he will find the instrument a poor substitute for a parachute!"

Operating a camera aloft in those early days was necessary for surveying, reconnaissance, bombing checks, camouflage detection and mapping. Today, two Navy squadrons at Andrews Air Force Base still carry out those primary purposes of aerial photography.

Light Photographic Squadrons 206 and 306 (VFPs 206 and 306), Naval Air Facility, Washington, D.C., continue to perfect the exact science of aerial photography. They fly the only operational variant of the *Crusader*, the single-seat RF-8G, to be seen on the flight decks of aircraft carriers.

The first RF-8A flew on December 17, 1956. The 144 built, called F8U-1Ps at that time, carried five cameras in place of the 20mm Colt cannons in the forward fuselage of the fighter version. Seventy-three were converted to RF-8Gs with strengthened wings, ventral fins, fuselage reinforcements, a new navigational system and redesigned camera station installations.

VFP-206 was established on June 1, 1970. The *Hawkeyes* are under the direct administrative and operational control of Commander Carrier Air Wing Reserve 20 (CVWR-20), NAS Cecil Field, Fla. While the air wing commander and most of his staff are active duty personnel, squadron commanding officers and a majority of the pilots are naval reservists. Approximately 45 percent of the enlisted personnel in VFP-206 are active duty TARs (training and administration of reserves) who operate the squadron on a daily basis; 55 percent are reservists who drill on weekends. In order to maintain peak proficiency, the reserve pilots attend nearly 100 drills a year and many perform up to 28 days of active duty for training annually.

VFP-306 was established the same day at the naval air facility. The *Peeping Toms* are under the operational control of Commander Carrier Air Wing Reserve 30 (CVWR-30), NAS Alameda, Calif. The VFP-306 percentages are nearly the same as VFP-206.

The two squadrons, with their eight RF-8s, closely parallel the Navy's active duty photoreconnaissance squadrons. Operationally, their missions are identical to the fleet units. Training is conducted in aerial photography – including high speed, low altitude reconnaissance under different simulated conditions, air wing exercises and carrier qualifications.

Over the years, in support of squadron training missions, numerous special photographic projects have been flown for various government agencies. A recent one was by VFP-206 over Three Mile Island during the nuclear accident. A congressional subcommittee requested supportive aerial photographs of the area. Other missions, on a more routine basis, include aerial photography for such agencies as the Census Bureau, Environmental Protection Agency, National Park Service and Federal Bureau of Investigation.

Commander Richard "Skip" Coffman and Commander Thomas Irwin are the commanding officers of VFPs 206 and 306, respectively. They typify the excellent experience level available in today's reserve units.

CAMERA

The success of any photographic mission depends on the pilot, who is literally surrounded by cameras, the cameras themselves and the all-important ground crew which maintains them and the planes.

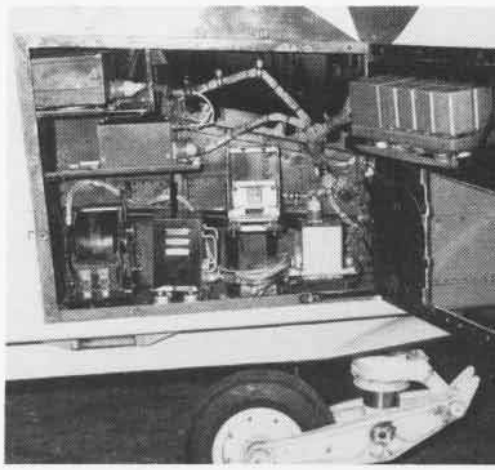
There are four camera bays in the RF-8G. Station #1 is the slight blister in the fuselage beneath the cockpit. This stationary camera, pointed straight ahead, can shoot either 5"x5" stills or 16mm motion pictures. Station #2 is a 70mm panchromatic camera located on the right side of the fuselage. This camera has the ability to shoot a 180-degree horizon-to-horizon 10-inch-long negative at an exposure rate of 12 negatives per second. Stations 3 and 4 are essentially the same, one on either side of the fuselage. These cameras, mounted on rotatable racks, shoot from the horizontal and the vertical.

The cameras shoot through six glass windows, gold-plated so they can conduct an electrical charge for defogging purposes. They have their own history. The first camera system mounted in an F-8 was the Trimet. This featured the trimetrogon camera which had three lenses. A single, horizon-to-horizon photograph was obtained by opening the three lenses simultaneously. The three negatives and the prints would overlap slightly.

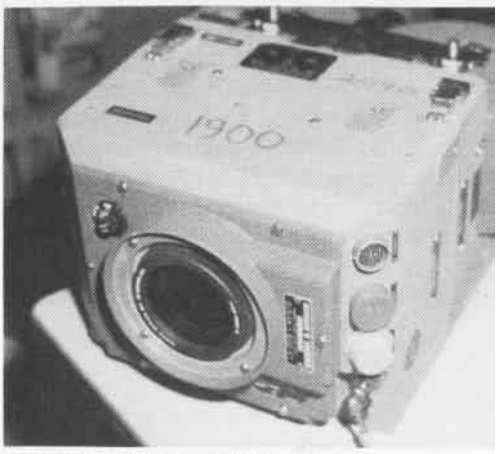
The next F-8 camera system was the KA series, which included KAs 45, 51, 53 and 62. The latest cameras mounted in the F-8s are the KS series. VFPs 206 and 306 have the KS-87B cameras mounted in stations 3 and 4; station 1 contains the KA-51 camera or a motion picture camera; and station 2 houses the Pan KA-66. These cameras use color, infrared or black-and-white film.

The NAF Washington light photographic squadrons conduct ground and flight training 52 weeks a year to meet the needs of the Navy, and other requirements. When all the RF-8Gs are off on missions, other pilots often walk across the street to the NAF training building and "fly" the F-8 trainer — one of two operational *Crusader* simulators left in the Navy. The other one is at Miramar.

Today, over a hundred years after the first aerial photographs were shot from balloons during the Civil War, the exacting science of aerial reconnaissance thrives as a mainstay in our nation's defensive arsenal. It is important to remember that the pilots of these RF-8Gs, like all Navy photo-recon pilots, have gone into combat areas for the United States — unarmed and unafraid.

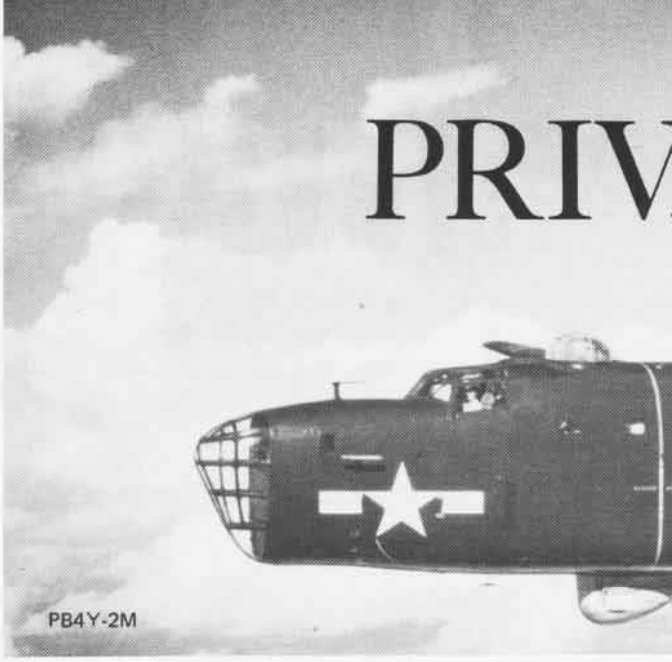


Camera is mounted in lower left-hand corner of station 2 amid electronic gear that operates other stations.



KS-87B camera is newest type used in Crusaders. Close inspection of cockpit gauges below, shows special photo panel by stations.

PRIV



PB4Y-2M

Navy use of land-based patrol planes began before the Pearl Harbor attack and our entry into WW II. With the need for longer ranges and increased use of land-based types, particularly for Arctic and other northern wintertime operations, the Navy acquired Army B-24s, redesignated as PB4Y-1s, beginning in September 1942. Operation of these aircraft dictated several changes to meet most Navy patrol-bomber needs: the high altitude capability of the B-24 was not necessary, additional crew space and electronics installation were required, and the single plane operations in the Pacific theater necessitated increased armament.

To meet these requirements, a much modified version of the *Liberator* evolved as the PB4Y-2 *Privateer.* With a longer nose, an additional top turret and new waist-powered turrets, the new model was also designed with a single vertical tail in place of the B-24's twin tails. The first XPB4Y-2 flights were made in late 1943 with the twin tail configuration prior to single tails being installed. The *Liberator's* turbo superchargers were deleted, and mechanically supercharged P&W R-1830s installed with higher power ratings at the lower altitudes at which Navy patrol missions were flown. While initial PB4Y-2s had a *Liberator*-type nose turret, most were modified, as were PB4Y-1s, to have an Erco ball turret installed in the nose.

Production PB4Y-2s were delivered to Navy squadrons beginning in May 1944 with VPBs 118 and 119 taking their *Privateers* into Pacific theater combat operations in January 1945. From this time on, PB4Y-2s augmented and gradually replaced the Navy's *Liberators* in VPB squadrons. Some *Privateers* were equipped to carry and launch two *Bat*-guided glide bombs as PB4Y-2Bs, and these were also in operational service in the spring of 1945. When *Privateer* production was terminated at war's end, 840 had been built (including the three prototypes).

With some modified for weather flying as PB4Y-2Ms, the *Privateers* were the mainstays of Navy VP squadrons in the post-war period. Some were modified with improved AWS systems as -2Ss before they were finally replaced by P2Vs and placed in desert storage.

The build-up for the Korean War brought them back into service with recalled reserve and newly formed regular VP squadrons. Some were also delivered to the French in Southeast Asia. As the P4Y-2 series, they served with both fleet and reserve squadrons; through much of the Fifties with the latter. A few served the Coast Guard as P4Y-2Gs and the final Navy use saw them flying as P4Y-2K target drones into the early Sixties.

PB4-2

Span	110′
Length	74′7″
Height	29′2″
Engine	
four P&W R-1830-94	1,350hp
Maximum speed	247 mph
Service ceiling	19,500′
Maximum range	
two bombay tanks	2,900 miles
Crew	12
Armament	12 – .50 machine guns
	up to 12,800 lbs. of bombs

PB4Y-2

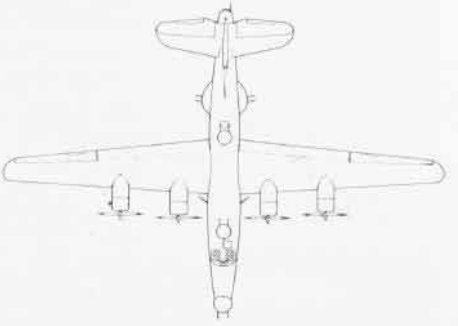
P4Y-2G

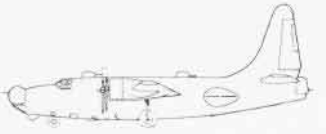
P4Y-2K

XPB4Y-2

P4Y-2S

XPB4Y-2





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Awards

The CVW-2 Golden Tailhook Award was presented to VF-154 at Cubi Point. Flying the F-4J *Phantom II,* the *Black Knights* won honors for three of the five competitive periods during their WestPac deployment aboard *Ranger.* The award is given to the squadron in an air wing that has the best landing performance during the entire competitive period. Individual honors went to Lt. Jerome Baliukas as the Top Tailhooker of the Cruise.

RAdm. Charles Prindle, ComPatWingsPac, presented the AVCM Donald M. Neal Aircraft Maintenance Award to VP-17, in memory of the master chief who dedicated his naval, and subsequent government, career to the development of maintenance technology.
The award was accepted by LCdr. T. Lagomarsino, maintenance department head; AMCS J. Haddaway; maintenance control CPO; and AMS3 M. Meaney, on behalf of C.O. Cdr. Ron W. Martin. East Coast recipient was VP-24, Jacksonville. As a first for the reserves, the award was also presented to VP-60, Glenview. In the past, this award always went to fleet patrol squadrons.

In a ceremony aboard *Eisenhower,* VF-143 received the carrier's Silver Wrench Award for recognition of its consistently outstanding maintenance efforts. C.O., Cdr. Paul W. Cooper, Jr., accepted the award and added his own words of praise for the caliber of work accomplished by squadron maintenance personnel.

At the annual Fighter Country Fling held at Oceana, VF-31's Lt. Ollie Wright was named the Fighter Wing One Naval Flight Officer of the Year. Selection was based on superior performance as both a naval officer and radar intercept officer. In his second tour with the *Tomcatters,* Lt. Wright has over 1,600 hours in the F-4 *Phantom* and over 500 arrested landings.

LCdr. John Kish, a reservist in VA-205, Atlanta, was named the Top Naval Reserve Weapons Delivery Pilot for 1979. He competed with 17 other reserve aviators from six squadrons for the honor.

HSL-36's skipper, Cdr. Charles Kiseljack, puts the finishing touches on one of the newest additions to squadron helos – an

"A" which represents ASW excellence. Helping the C.O. are AK1 Edenito Damilio (left) and ABF3 Dean Leonard.

CVW-1 Go-Crow Award is given to the air wing squadron achieving the best advancement rate based on the number eligible compared to the number advanced in a given cycle. Cdr. March, wing commander, presented the award to Ltjg. Rich O'Hanlon who accepted on behalf of VA-46, Cecil Field. YNC J. McGrew received a check, accompanying the award, for the squadron recreation fund.

During a ceremony at Miramar, Lt. Geoffrey W. Dundas of RVAW-110's training department received the Navy Commendation Medal from outgoing skipper Cdr. W. H. Reed, Jr. In the accompanying citation from SecNav, Lt. Dundas was lauded for his keen analytical insight, shrewd judgment and exceptional initiative in challenging existing policies which permitted only second tour pilots to receive night carquals during training. Dundas instituted a revised training syllabus which resulted in the qualification of a first tour pilot aboard *Coral Sea* in February 1978. This procedure increases operational flexibility among Pacific Fleet VAW squadrons, while enhancing morale.

VT-19, Meridian, was awarded a Meritorious Unit Commendation for the period June 30, 1976, to June 30, 1978, for its outstanding flight record. During the ceremony, Capt. W. W. Hargrave, Jr., ComTra-Wing-1, commented, "This outstanding achievement of total flight hours (88,000) without an accident during a period in excess of six years is unparalleled in the annals of the Naval Air Training Command."

Several personnel were honored recently for participation in medevacs performed by detachments of HC-11, North Island. They were: AT1 Michael L. Bearup, Navy and Marine Corps Medal, for heroism as crew chief of a CH-46D attached to Det 6; Ltjg. Charles S. Bowers III, Air Medal, for co-piloting a CH-46D from Det 2; and AM1 Lawrence J. Aguilar, Navy Commendation Medal, for action as crew chief on board a CH-46D assigned to Det 2.

Honing the Edge

A recent missile firing exercise conducted by the *Freelancers* of VF-21 resulted in a direct hit on a target drone. The Bula-Bula, as it is called, was the culmination of superb team effort. The F-4J *Phantom II* making the kill was piloted by Lt. Brian Fitzpatrick and guided by RIO Ltjg. Pat Nevitt.

The VAW-121 *Bluetails* are pictured in formation over *Eisenhower* while on a recent Med deployment.

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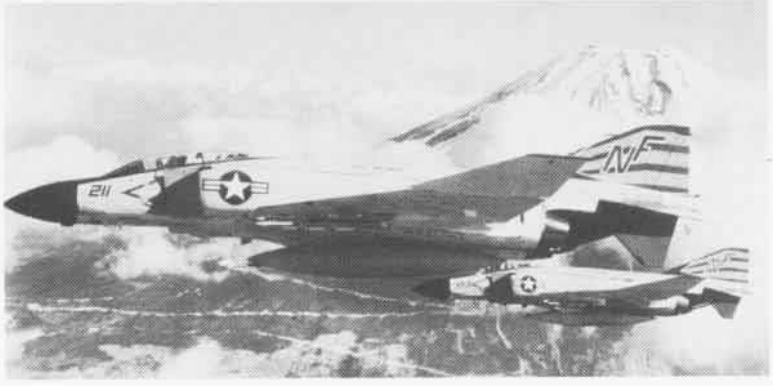
Dwarfed by the flag of the nation she serves, the 78,000-ton carrier *America* rests at anchorage in Souda Bay, Crete, while serving in the Sixth Fleet.

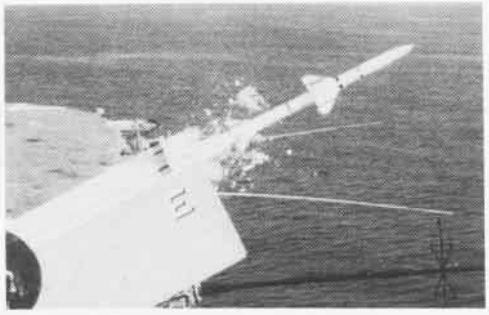
VF-151 aircraft pass close to Mt. Fuji en route to Atsugi when returning from a weapons deployment to Kwang-Ju Air Base, Korea. Commanded by Cdr. Denny Wisely,



the *Vigilantes* conducted extensive air-to-ground weapons delivery and ACM training, completing 130 sorties for a total of 150 flight hours.

VPF-306, NAF Washington, D.C., deployed for a week to Nellis AFB with two RF-8G *Crusaders* and 25 personnel to participate in Operation *Red Flag,* marking the first time a Navy photoreconnaissance squadron, active or reserve, has flown in this exercise. *Red Flag* is a tactical air command exercise designed to give a pilot the most realistic training possible by simulating a combat environment. The squadron flew a total of 19 sorties and logged 29 hours of flight time.

In photo, a *Sea Sparrow* is fired from its launcher on *Guadalcanal* (LPH-7) during a training operation at the Atlantic Fleet Weapons Training Facility near Roosevelt Roads.



VA-65's *Tigers* returned to Oceana from a six-month Med deployment aboard *Eisenhower* with quite a list of accomplishments. The squadron had 27 centurions and 3 double centurions, with LCdr. Don Quinn being first of all *Ike* aircrewmen to achieve 200 arrested landings. X.O. Cdr. Joe Prueher reached 2,000 A-6 flight hours, while LCdr. "Fox" Fallon passed the 1,000-hour mark. VA-65 participated in Exercises *National Week XXVII, Dawn Patrol, Poop Deck* and Operation *DASix* while deployed. During their training cycle at Oceana, the *Tigers* will be the first East Coast A-6 squadron to transition to the target recognition attack multisensor system (TRAM), which will greatly enhance the *Intruder's* night and all-weather attack capability.

Records

Several squadrons marked accident-free milestones: HS-15 – 6 years, 20,000 flight hours; VAW-115 – 7 years, 13,000 hours; VA-165 and VP-17 – both 9 years, 40,000 and 69,000 hours, respectively; and VC-3 – 15 years, 61,000 hours.

LCdr. Robert Boynton, safety officer of VA-35, completed his 500th carrier arrested landing, which includes 200 traps aboard *Nimitz.* The *Black Panthers* are home-based at Oceana and fly A-6E *Intruders.*

Cdr. Bob "Bullet" Canepa, VF-21's X.O., made the 800th arrested landing of his career aboard *Ranger,* logging over 4,600 accident-free flight hours during seven consecutive squadron assignments. He has also accumulated traps aboard *Lexington, Oriskany, Kearsarge, Bennington, Yorktown, Randolph, Hornet, Midway, Constellation,* and *Enterprise.*

LCol. William L. Waters, skipper of Tustin's HMM-164, flew his 6,000th accident-free flight hour in a CH-46 *Sea Knight.* A Marine aviator for 18 years, he served three tours in Vietnam and was formerly presidential helicopter command pilot.

Personnel from North Island's HSL-33 recorded several notable events recently. LCdr. Bob Rankin passed the 1,000-hour mark in the H-2, while AWC Robert K. Wagner marked 4,000 hours in the helo. Not to be outdone, Lt. Steve R. Laabs made lieutenant and helicopter aircraft commander on the same day.

Led by C.O. Cdr. D. J. Wright, eight VA-25 pilots logged 100 or more A-7E traps aboard *Ranger.* The others were: LCdrs. Larry Wahl and John Leslie; Lts. Al Detwiler, Don Thompson, Tom Vaughn and Jim Naumann; and Ltjg. Ron Vanbladeren. Lt. Detwiler also recorded *Ranger's* 203,000th arrested landing.

A major milestone in the LAMPS community was achieved by Cdr. Charles Kiseljack, skipper of HSL-36, Mayport, when he became the first pilot to fly 4,000 hours in an H-2 *Seasprite.* During a ceremony following the flight, Cdr. Kiseljack was presented a plaque made with a chrome cyclic and a desk set fashioned with an H-2 collective, both crafted by HSL-36 personnel. He complimented the sailors of HSL-36 by saying, "I could never have attained this goal without the fine effort put forth by this squadron."

AC3 JoAnn Andrews accomplished a first at Oceana by becoming the first woman to qualify at the automatic carrier landing system (ACLS) site since its installation in 1969. The ACLS, until now dominated by all-male crews, is part of the intricate air traffic control system at the air station. It permits pilots, in properly equipped aircraft, to fly automatic, hands-off approaches to the runway in all weather conditions. Andrews is now training as a departure controller and, at her present pace, could become Oceana's first woman air traffic control facility watch supervisor.

Ltjg. Dale Williams, VA-94, flew an A-7E aboard *Kitty Hawk,* chalking up the carrier's 179,000th trap. The *Mighty Shrikes,* presently deployed in WestPac, are based at Lemoore.

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Records

Several squadrons have achieved accident-free milestones: VF-111, 20,000 hours; HS-74, 30,000; HC-3, 38,700; VS-24, 58,000; VA-128, 60,000; VAW-112, 6 years; HSL-37, 4; and VA-93, 2.

Sea Cadets

Ltjg. Tom Mason (left), an NFO in VA-42, explains vital functions of an A-6E *Intruder* to Sea Cadets from the Dahlgren Division, Washington, D.C. Commanded by Lt. Henry E. Mooberry, the group visited Oceana last summer.

Disestablished/Reestablished

On June 29 the National Parachute Test Range, El Centro, was disestablished and the Naval Air Facility rededicated. NPTR's aircraft were transferred to China Lake. It was also announced that a detachment of VA-174 will be permanently assigned to the NAF. The Det's mission is to train fleet replacement pilots in A-7Es and TA-7Cs.

Anniversary

Oceana's VA-35 celebrated its 49th birthday on July 1. The *Black Panthers* have seen action in WW II, Korea, Lebanon, the Cuban missile crisis, Vietnam and the *Pueblo* incident. The squadron recently was awarded its second consecutive CNO Safety Award, recognizing its safety record which spans more than 8½ years and 39,000 accident-free hours.

Change of Command

CarStrikeForSeventhFlt/CarGru-5: RAdm. Robert E. Kirksey relieved RAdm. E. E. Tissot.

HAL-4: Cdr. John F. Westbrook relieved Cdr. James L. Poe.

HM-14: Cdr. Thomas H. Hoivik relieved Cdr. Robert E. Jones.

Inchon (LPH-12): Capt. J. J. Higginson relieved Capt. W. H. Greiwe.

Midway: Capt. Inman Carmichael relieved Capt. Thomas F. Brown III.

NAS Memphis: Capt. George Ormond, Jr., relieved Capt. Ronald J. Kurth.

NAS Miramar: Capt. Raymond D. Donnelly, Jr., relieved Capt. Thomas J. Cassidy, Jr.

VF-31: Cdr. Roy Cash, Jr., relieved Cdr. Dennis A. Sullivan.

VP-91: Cdr. Samuel E. McWilliams relieved Cdr. John H. Mascali.

VS-32: Cdr. Arthur C. Harris III relieved Cdr. Paul E. Pedisich.

TIME TO STAY

ATC Maurice Vincent

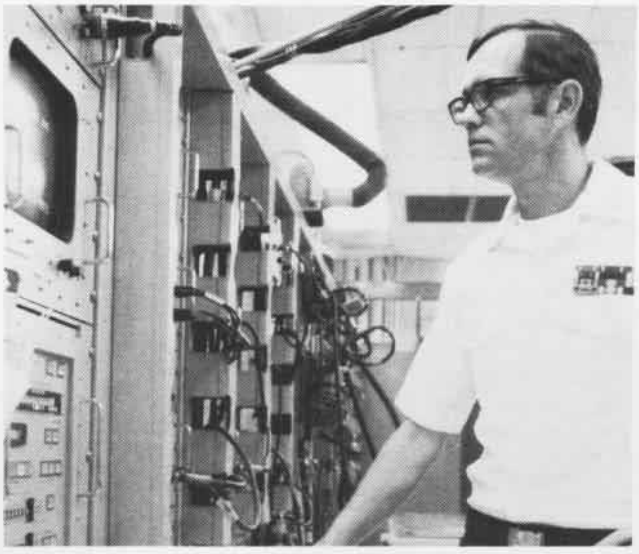
Reenlisted on board VF-32 at NAS Oceana for 3 years in September 1979.

"I was due for transfer to the Fleet Reserve at the end of this enlistment, coupled with an attractive civilian career in the industrial computer field. It was most definitely a difficult choice to decide to remain on active duty.

"Realizing that I would probably be able to double my present income, not having to worry about family separation, stand duty or conform to military regulation, other people have asked why I'm staying in.

"The answer is simple. Really not for monetary reasons, but rather for the sense of job satisfaction that I receive from serving in the naval forces and the sense of achievement obtained from doing something only a select few individuals are willing to do in today's society – serve their country up front.

"Being a member of Naval Air's best fighter squadron only made the choice to remain easier."



Flight Engineers Needed

Volunteers are needed to fill vacancies in the P-3 flight engineering program. Besides the earning of wings, there are extra incentives in the form of duty stations and flight pay. Available duty stations are at Jacksonville, Fla.; Brunswick, Maine; Moffett Field, Calif.; Barbers Point, Hawaii; Rota, Spain; and Agana, Guam.

Needed are volunteers from AD, AE and AM ratings, E-4 through E-8, who are within 12 months of projected rotation date. To apply, submit a NavPers 1306/7 request via chain of command to NMPC-404ED. Further information may be obtained by telephoning ADCS Robertson on autovon 291-5869.

Flight Pay Proposed

There is proposed legislation en route to Congress to increase enlisted flight pay. Currently under review by the Office of the Secretary of Defense, the request is for a 50-percent increase. There is also a provision that would link future increases to upward adjustments in basic pay. Proposed rates are:

Pay Grade	2 or less	Over 2	Over 3	Over 4	Over 6	Over 8	Over 10	Over 12	Over 14
E-9	$160	$160	$160	$160	$160	$160	$160	$160	$160
E-8	160	160	160	160	160	160	160	160	160
E-7	120	130	130	130	135	145	150	160	160
E-6	105	115	115	120	130	135	145	145	150
E-5	90	105	105	120	120	130	135	145	145
E-4	85	100	100	105	115	120	120	120	120
E-3	85	90	90	90	90	90	90	90	90
E-2	75	90	90	90	90	90	90	90	90
E-1	75	75	75	75	75	75	75	75	75
Aviation Cadets	75	...	...	...	...	...	...	...	...

ANTARCTIC ANNIVERSARY

By Sandy Nye

Byrd's Ford trimotor

On November 29, 1929, Commander Richard E. Byrd navigated a Ford trimotor over the South Pole, becoming the first man to fly over both the North and South Poles. This year marks the 50th anniversary of that historic flight which took almost 19 hours round trip from a base in Little America. Bernt Balchen piloted the aircraft with crew members Harold June, copilot/radio operator, and Ashley McKinley, aerial photographer. As the plane flew over the spot calculated to be the South Pole, Byrd dropped an American flag weighted with a stone from the grave of Floyd Bennett, his close friend and companion on the North Pole flight in 1926.

While on leave of absence from the Navy, Byrd estimated the cost of an expedition to the South Pole at $750,000. After raising about one-half million dollars, from public subscription and private contributions, he began the journey with two ships, *City of New York* and *Eleanor Bolling*, five planes, 95 huskies; and large stores of food, radio equipment and clothing. His group was prepared to spend a year in the Antarctic. Shortly after Christmas 1928, the party reached the Bay of Whales, an open water indentation in the ice shelf bordering the southern side of the Ross Sea. A camp was established there which was named Little America. It was from this field on McMurdo Sound that the flight was made.

In December 1929, Byrd was advanced to the rank of rear admiral by a special act of Congress. At age 41, he was the youngest admiral in the Navy at the time.

Perhaps most important was the discovery of the Edsel Ford Range and the Rockefeller Mountains east of the Ross Sea – named Marie Byrd Land, for his wife. RAdm. Byrd was a firm believer in the value of Antarctica to the United States and to the world. From the time of his first expedition to the area in 1928 until his death in 1957, he devoted his life to keeping American interest in the region alive. During that period, the U.S. explored more territory in Antarctica than all other nations combined.

RAdm. Byrd was one of the most colorful and complex characters of his generation. Daring adventurer, scientific explorer, outstanding leader, philosopher, inventor, poet, dreamer, mystic, skillful aviator and organizer—such was the man who pioneered the airways over the Atlantic and both Poles, adding an abundant amount to man's knowledge of the earth.

A lonely man and a lover of solitude, he was also a most agreeable host and companion. Those who knew Byrd best admired him and had great confidence in him. No man under his direct command ever lost his life on any Byrd expedition.

Born in Winchester, Va., on October 25, 1888, the younger brother of Senator Harry Flood Byrd, he traveled around the world alone when he was 12. A former law partner of his father was then a district judge in the Philippines and invited the boy to visit him.

He entered the Naval Academy at Annapolis in 1908 and while there suffered several football injuries and a broken foot and ankle due to a fall. These were responsible for his early retirement in 1916 from active service. Following his graduation in 1912 came a number of routine assignments on various Navy ships.

"Navy regulations would not allow any promotion on account of my

injury," he said. "I was retired on half pay, ordered home for good. Career ended, not enough money to live on, no chance of coming back, trained for a seafaring profession, temperamentally disinçlined for business. A fizzle."

He was recalled to service only months after being retired and the Navy appointed him instructor-inspector of the Rhode Island Naval Militia. With the outbreak of WWI, he was transferred to Washington, but soon talked his way out of a desk job into cadet training at Naval Air Station, Pensacola, receiving his wings on April 17, 1918. Byrd was assigned duty as commanding officer of the U.S. Naval Aviation Forces in Canada, with additional duty in command of Naval Air Stations, Halifax and North Sidney, Nova Scotia.

In April and May 1919, he participated in the navigational preparation for the transAtlantic flights of the NC planes, for which he invented several aerial navigational instruments.

In the mid-Twenties, the name of Richard E. Byrd made headlines again and again for his daring projects and far-reaching expeditions. On May 9, 1926, he and his assistant, Chief Machinist's Mate Floyd Bennett, flew over the North Pole, a feat for which both received the Medal of Honor and the Distinguished Service Medal. The year 1927 marked his transAtlantic flight in the trimotor Fokker *America*. He was awarded the Distinguished Flying Cross in recognition of his skill as commander of the expedition which flew the aircraft from New York City to France under extremely adverse weather conditions.

The years that followed in his career brought Byrd many prestigious assignments and distinguished awards, including the Navy Cross, Medal of Freedom, Legion of Merit with Gold Star, Commendation Ribbon, medals commemorating his Antarctic expeditions, as well as service medals and honors from many scientific societies and foreign governments. The guided missile destroyer, *Richard E. Byrd* (DDG-23), was launched and christened February 1, 1962.

After his death on March 11, 1957, he continued to receive honors as one of the great explorers of all time. As Naval Aviator #608, he was enshrined posthumously December 17, 1969, in the national Aviation Hall of Fame, Dayton, Ohio, for his pioneer efforts in the use of aviation in polar exploration. On the Avenue of Heroes on the Virginia side of the Memorial Bridge, Washington, D.C., is an eight-foot statue of RAdm. Byrd. The figure, depicting the admiral in full cold weather dress, is mounted on Italian white marble to simulate a snowfield. A replica of the memorial bust stands at McMurdo Station, Antarctica.

RAdm. Byrd long believed that the polar region offers great hope in natural resources to augment the world's present known supplies. His feelings for the region are best expressed in his own words, in an article he wrote for *National Geographic* magazine.

"In the bottom of the planet, lies an enchanted continent in the sky, like a pale, sleeping princess. Sinister and beautiful, she lies in her frozen slumber, her billowy white robes of snow weirdly luminous with amethysts and emeralds of ice, her dreams iridescent ice halos around the sun and moon, her horizons painted with pastel shades of pink, gold, green and blue. Such is Antarctica, luring land of everlasting mystery."

OLDEST NAVAL AVIATOR DIES

By Captain Paul Jayson, USNR(Ret.)

Robert Rudolph Paunack, Naval Aviator #27, died this past September at the age of 93. He was buried at the Barrancas National Cemetery in Pensacola, Fla.

There were few mourners for the oldest Naval Aviator. Just a few family members, a couple of Silver Eagles (early enlisted pilots) and members of the burial detail.

Chaplain John Dologhan noted the sparsity of the crowd and said, "This is not unusual, for he had outlived all of his contemporaries."

Captain "Rip" Paunack died on September 7. He had arrived in Pensacola to take up aviation training in 1915. He was one of eight who started. A fellow student was A. C. Read, who was the pilot in command of the NC-4 flying boat that crossed the Atlantic in May 1919. Paunack's instructor was Richard Saufley, Naval Aviator #14, and his other contemporaries were Francis Evans, the third Marine to earn Navy wings, and Kenneth Whiting, Clarence Bronson and William Corry.

A 1909 graduate of the Naval Academy and native of Madison, Wisc., Paunack admitted he was not what he called a daredevil aviator.

"I never felt the urge to do spectacular things, as some fellows liked to do," he said. "I was trying to get along as well as I could, 'cause I knew there was a risk all the time."

He did have a few close calls during his flying days. Shortly after finishing the Pensacola flight course, he was in the air over the bay "just getting some time" when the engine of his hydroplane self-destructed. "All of a sudden I heard an awful bang," he explained, "and I could feel the engine had stopped. I nosed down and landed on the water. When I looked to see what had happened, there was only half of an engine up there! The thing had exploded and had flown in all directions. The propeller had been cut into pieces. Those planes didn't have any fuselage, just four bamboo sticks supporting the main structure. One of those fore and aft frames that support the tail and rudder was cut about two-thirds of the way through. If the metal had gone through, the tail would have collapsed and I would have dropped like a rock. It didn't. I was lucky."

Paunack made his own "luck" in an incident that occurred about the time that A. C. Read and the NC-4 crew were being given world acclaim for the ocean flight. On June 3, 1919, as pilot in command of the C-8 dirigible, he earned the Distinguished Flying Cross for heroism in flight "and in recognition of the prompt and courageous action in saving the dirigible from destruction by fire."

As Paunack recalled the details, he described the airship as having a fuselage that was "a sort of boat" hanging under the balloon area with two engines, one at each side, each beam-braced to the fuselage.

"The balloon carried hydrogen, which was very explosive, and the engines were right under the balloon, raised up higher than the fuselage," he recalled. "A flame popped out on one engine. We had some pyrene fire extinguishers with us but the fire was too far away. It wouldn't squirt that far. So I took one and stuck it in my pocket and climbed onto one of the outriggers. I slid out, like riding horseback, and squirted. The fire went out. I had to slide about 10 feet with nothing below me except water. I wasn't frightened a bit. . .until later, when I realized what would have happened had I slipped off that thing."

The citation said the C-8 was at 8,500 feet and the flames were licking the hydrogen-filled bag of the dirigible.

A third incident left Paunack with a red face and hurt pride. In 1927, while serving as the executive officer of USS *Langley*, the converted collier that was the first U.S. aircraft carrier, he decided to try a landing on his ship.

"I was circling around. There was a fellow right at the stern signaling with a flag in each hand to sort of guide you," Paunack recalled. "As I was coming in, he held the flag up. I thought it meant to slow down. Always the problem was 'slow down, slow down' when you made a landing. As a matter of fact, it was one to speed up. I guess I was confused. An F flag was go faster; an S flag, slower. The signaler waved his arms fast to me to go faster but it was too late. The plane just flopped down on the stern and busted the landing gear. I didn't get hurt. But my pride suffered because I was the executive officer."

Of those *Langley* days, when the Navy was testing its methods for taking aviation to sea, Paunack had fond memories. "It was a nice, very interesting experience. There was no bitterness, no nastiness, no trouble. Everybody had a job to do. They knew it was serious and they devoted themselves to it. There were no jealousies or envies or anything of that sort. Each one got what he earned and deserved. Everyone was satisfied with that."

During his flight student days, Paunack and Read roomed with a Pensacola native named Ellis Knowles, who is credited with starting the Pensacola Country Club. "We golfed every day and on Sundays," he recalled. The golf habit stayed with Paunack. Even after passing age 90, he spent part of each day swinging his clubs in the yard.

As a line officer/aviator, Paunack served in a variety of posts. He was commanding officer of Naval Air Station, Cape May, N.J., during WW I. In the 1920s, he was officer-in-charge of the lighter-than-air school at Pensacola and later had a tour as commanding officer of the San Diego Naval Air Station. In the 1930s, he was twice flight division head in the Bureau of Aeronautics. He retired as a commander in 1935, was recalled in 1941, and retired the second time as a captain in 1944.

HAL 5

By JO1 Don Ray and Ens. Rudolph Cortez

In June, Helicopter Attack Squadron (Light) Five (HAL-5), NAS Point Mugu, Calif., traveled to the National Parachute Test Range, El Centro, Calif., for its annual two weeks of active duty training under the leadership of Commander Clyde Kizer, the squadron's commanding officer.

During their stay at the desert facility, the *Bluehawks* conducted six simulated combat search and rescue exercises in cooperation with HC-9, the reserve combat SAR unit based at NAS North Island. With an HC-9 H-3 in the role of rescue helo and HAL-5 HH-1Ks acting as escorting gunships, the aircrews were able to safely recover the downed survivor – a HAL-5 pilot. During each exercise, the survivor used his radio, compass and mirror to communicate his position to the rescue helo.

Each exercise was conducted under the watchful eyes of a handful of "aggressors" from the Fleet Aviation Specialized Operational (FASO) Training Group, Pacific Fleet at North Island. FASO personnel produced simulated aggressor ground fire and HAL-5 aircrews simulated firing back with their gunships' GAU-2s and M-60s.

High overhead, F-4 *Phantoms* of VFs 301 and 302, NAS Miramar, made "strafing" runs on the aggressor's positions, giving the helos the extra time necessary to move in.

HAL-5 pilots also practiced approaching a "hot" area using terrain evaluation and route finding (TERF). A noisy helicopter employed low-level navigation and masked itself below tree and ridge lines, making the rotor noise omnidirectional and thus helping to hide the true position of the aircraft. Nine pilots and eight aircrewmen were qualified in TERF procedures by the end of the two-week cruise.

In the final combat search and rescue operation, the various participants were flown into the exercise area while the SEALs from Special Warfare Group One, Naval Amphibious Base, Coronado, Calif., made their parachute drop miles from where the planned rescue was to be made. This time, however, the survivor had a SEAL squad as his escort through enemy lines. The combined efforts of the "fast movers" orbiting above, the SEALs on the ground and the *Bluehawks* providing close air support, enabled the SAR helo to close in and make its recovery.

The *Bluehawks* also worked closely with the SEAL team, flying several practice covert insert and extract missions.

While half of the squadron's aircraft were participating in the rescue exercises, the remaining helicopters flew to SEAL-operated Camp Kerrey, near the Salton Sea's eastern shore, where they were loaded with 2.75-inch folding fin aerial rockets which they fired on the nearby naval bombing range. A handful of HAL-5's ordnance specialists, living in a tent a few yards from the helicopter landing zone, loaded the helos.

As the helo pilots, many of them veterans of the *Seawolves* of HAL-3, honed their firing skills, SEALs acted as spotters for the incoming rockets, relaying any necessary corrections before the aircraft made additional passes. The helo crews fired more than 1,000 rockets and 67,000 rounds of ammunition from the GAU-2s and M-60s.

At the HAL-5 hangar at NPTR El Centro, with the helicopters and crews constantly on the go, the maintenance men worked 10 to 12-hour days. "The availability of aircraft was 90 percent throughout the cruise," reports LCdr. Don Downing, HAL-5's operations officer.

HM1 Robert Vinck, a TAR assigned to Point Mugu's medical department, accompanied the squadron for the two weeks. Vinck flew with the rescue helicopter on missions and instructed personnel in cardiopulmonary resuscitation during off-duty hours. Every member of the class was certified.

In addition, ground training was conducted in each work center and, when time permitted, PO Wayne Meadows held pistol and rifle qualifications at the El Centro firing range. Personnel also participated in swim quals and lectures on pyrotechnics.

Recording all this was a detachment of photographers from the Reserve Audio Visual Unit 176, Point Mugu, and a NARU Point Mugu journalist. Charged with capturing the entire cruise on film, using motion picture and still cameras, Unit 176 filmed the action from helicopters and from the ground.

The VA-122 line division at NAS Lemoore, Calif., is what the name implies, a division of people who keep VA-122's 45 aircraft on the flight line, ready to go. No less than 97 personnel are involved in this task: 22 troubleshooters, 70 plane captains (PCs) and the balance, office workers.

The plane captain, as described by former line supervisor ADJ1 Bill Moss is "the lifeblood of the aviation community, the man each pilot trusts with his life." His job is anything but simple.

A lot goes into making a plane captain. The process begins with an airman recruit or airman apprentice, often not long out of high school and not knowing an A-7 from a T-28. Training him to be a plane captain takes 6 to 12 weeks with the average trainee needing nine weeks to complete the syllabus.

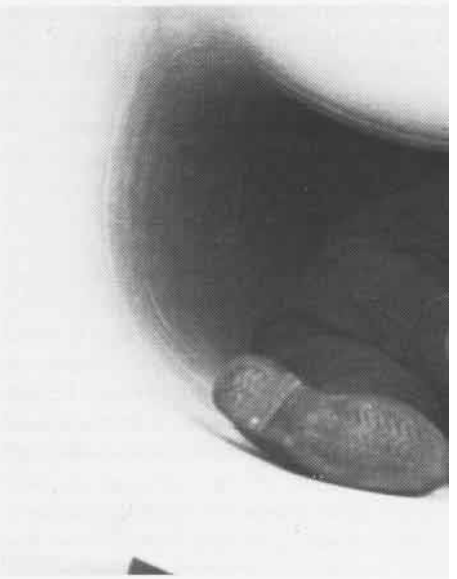
AS THE LINE

The learning process begins immediately. The trainees start on a piece of equipment with which they'll be spending a lot of time, the ejection seat. Students are sent to the seat shop where the AMEs teach them some of the basics such as the location of the ejection seat handle and the safety pins.

Next is the safety brief. An experienced line petty officer explains the hazards of working with jet aircraft and how to avoid them. If a trainee is reluctant to work on planes after hearing the brief, a training petty officer takes him outside to a parked plane. He explains, on the scene, how the aircraft works and shows how accidents can be avoided. This procedure usually alleviates any fears.

The trainees are now ready to begin the on-the-line portion of their training. Approximately a week and one-half is spent learning how to ride the brakes (essential in aircraft moves) and work the skids, otherwise known as the refueling station. They are taught all the procedures of hot and cold fueling and refueling.

They also learn the different kinds of inspections: daily, turnaround, walk-around and 20-day. The daily inspection is made first thing every morning to check panels, vents, corrosion, missing screws and fuel, oil and oxygen levels. A turnaround is much like a daily except that it is performed after a flight returns, to



Plane captain trainee AR Susan Thompson signals instructor-pilot Lt. Phil Mills as AA Bret Burleson, upper left, straps in LCdr. Terry Nolan. Right, AMSAN Greg McCowan shoots the tube.

make certain the plane is ready to go again as soon as it is needed. The walk-around is a preflight visual inspection 45 minutes before pilot man-up to ensure that the aircraft is ready for takeoff. The 20-day is also known as "shooting the tube." The plane captain crawls through the intake, looking for foreign matter, and then spends about 90 minutes going over it with a special cleaning fluid.

The trainees usually spend the fifth through the eighth week in a classroom set up in the line division office. They learn the A-7's nomenclature and the systems that the plane captain is concerned with, how to check them out and how they are used. The trainees take a written test to pinpoint any problems they might have, prior to appearing before the plane captain board for final certification.

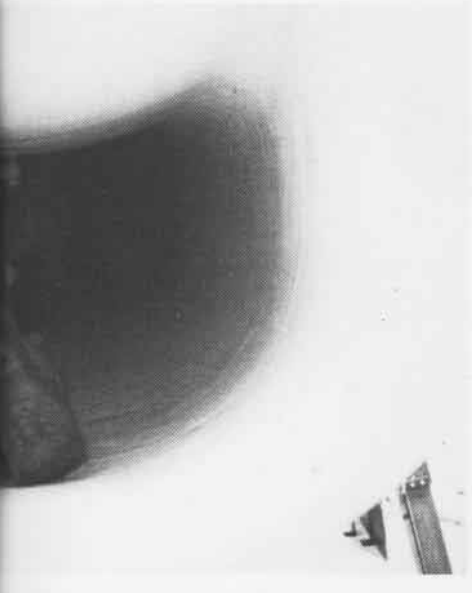
The troubleshooter section includes a representative from each shop and most of the aviation ratings. Personnel also perform duties other than those of their particular ratings. Each troubleshooter is cross-trained to handle daily and turnaround inspection gripes, as well as the standard launch discrepancies. Sometimes, when a problem is noticed just before launch, the troubleshooters can prevent the flight from being aborted by making repairs on the spot. Their division officer, Lt. Phil Mills, feels they are "one of the hardest working shops in the squadron."

About 16 percent of the line division's workers are female. What is it like to work with 16 women? Training petty officer AMH3 Dean Vitrano observes that "morale is better...the women do good work and keep up with the guys." Plane captain AMS3 Patricia Dunlap thinks that "working in the line division is a challenge."

According to Lt. Mills, the line's main contribution to VA-122's mission is to "get aircraft fueled, inspected and ready to fly" after the shop technicians have put the planes in an up status. "I stress to each new person reporting to the line that we are the front-line maintenance effort. I feel that as the line goes, so goes the squadron."

By JO2 Marc R. Matteson

GOES . . .



AMSAN Greg McCowan and AMS3 Joe Herrera, of VA-122's NAS Fallon detachment, perform functional preflight check of tail controls as AR Susan Thompson, upper right, examines A-7 external power pack.


AV GAS
F-22
NO SMOKING FLAMMABLE
WITHIN 100 FEET

Parting with Connie

By Tom Hull

To all appearances, August 1, 1979, was just another hot summer day at the Naval Research Laboratory (NRL) detachment, NATC Patuxent River, Md. The crewmen manned their aircraft as they had so many times before. Commander Ron Carlson called for the before-start checklist. Then he signaled the ground crew. The number four engine began to turn. The big Wright R-3350 groaned, belched a round of smoke and caught. The other three engines started effortlessly and the Lockheed EC-121K turned and slowly trundled toward the active runway.

The same sequence had been followed many times since BuNo 141297 rolled out of the factory in 1956. On this day she seemed to be taxiing out for just another NRL flight. But this was to be the old *Connie's* last.

Retirement had overtaken 297 and she was being flown by an NRL crew to Davis-Monthan Air Force Base, Ariz., otherwise known as the bone yard. Cdr. Carlson, the aircraft com-

mander, was a veteran with 14,000 hours flying time and had flown *Connies* since 1967. Two flight engineers were carried on the trip: ADRC Darwin Leatherman, who has flown only *Connies* in the Navy and was anticipating his own retirement soon after the flight; and the radioman, AT1 Sam Porter. The right-seater, Lt. Jeff Chewning, a newcomer to EC-121s, had come to love them during his short association with them.

The departure of 297 had a special significance since it marked the end of 20 years of *Connie* operations at NRL. She was the last of three that had been assigned to the detachment. The second EC-121 (WV-2 as then designated) built, No. 128324, arrived at Patuxent River in January 1959, replacing an R5D. She was NRL's first *Connie* and was used for studying meteorological patterns. The second, BuNo 135753, came soon after the first and was used for upper atmospheric research. BuNo 141297 was the third, reaching Patuxent River in September 1961. It had served six years with the Naval Air Development Unit at NAS South Weymouth, Mass. The first two *Connies* left for Davis-Monthan in July 1974 after January 1976, respectively.

During her years at Patuxent River, 297 was used primarily as an electronics warfare (EW) test bed in the development of missile simulators and the at-sea testing of EW shipboard equipment. She was also employed in icing studies, satellite tracking, locating eddy currents in the Gulf Stream, and photo work.

297 on the way to the bone yard.

EC-121s were first delivered to the Navy in 1952 although the C-121 transport version has been in military service longer. *Connies* have served with the Air Force, Navy, and many airlines throughout the world. One even served as Air Force One for President Eisenhower, carrying him during most of his term in office. The final EC-121 was delivered in September 1958, the last of five going to VW-2, then stationed at Patuxent River. One *Connie* remains in service with the Navy today, BuNo 141292, flying with VAQ-33 at NAS Norfolk, Va.

The day before 297's last hop, one could sense a deep regret on the part of Cdr. Carlson. "It's a good flying, comfortable airplane," he said. "We still call it the Cadillac. NRL people have a lot of pride in the *Connie* and it meets all of its mission requirements." Her duties at NRL will be assumed by an EP-3B *Orion*.

As Cdr. Carlson advanced the throttles and released the brakes 13,400-horsepower came to life and propelled the aircraft down the runway. She lifted off and made a gentle turn back toward the field for a final farewell pass by the NRL hangar. Turning on a westerly heading, the *Connie* faded from sight, on its way to retirement.

What will happen to 297? She will sit in the dry desert air for a year or so and could eventually be cut up for scrap — a sad end for such a proud lady! But nothing can detract from her reputation as one of the great recips of all time. She certainly will not be forgotten.

No Proven Formula

Golden Eagles

By G. L. Huiskamp, NA #308

In 1914, WW I broke out in Europe and I went to college. When Coolidge decided to "save the world for democracy," all of my fraternity brothers who were eligible enlisted. Out of 34, we lost four in the war. I enlisted in the Navy as a second class seaman and was sent home to wait for orders, which came about six weeks later.

I reported to the Philadelphia Navy Yard, was given the rank of first class yeoman and put in charge of the boiler shop payroll in the accounting department. (I had two years of accounting in college.) By August, Naval Aviation had been organized and I put in my application for transfer. It came back "refused" by a Commander Peck.

I decided to apply again for transfer, this time directly to Captain Addison, the head of the accounting department. When I presented my application to him I was trembling because I was afraid I'd be thrown out on my ear and possibly "disrated" for not going through channels. But he took the paper without looking at me, glanced at it, scowled at me, and said, "Do you have any complaints?" I said, "No, sir, quite the contrary."

"But why then do you want a transfer?"

"Sir, I've always been interested in flying and I would like to get into a service where I might be needed. Any man who isn't fit for more strenuous service could take my place here. Also, I'm ashamed of being an office worker in time of war."

He threw back his head and laughed and said, "Well, that certainly is refreshing enough. I'll tell Cdr. Peck to help you with your application and, if you qualify, to give you a transfer. If not, we'll keep you here."

Cdr. Peck called me about two hours later and asked me if I knew why he had refused my first request. The conversation went like this:

"No, sir."

"I did it for your father."

"Did he call you, sir? Do you know him?"

"No, I don't know him and I haven't heard from him. I just changed places with him. I thought, what would I want him to do in my place? I would have wanted him to keep my son out of the air service."

I landed in ground school at MIT in Boston about a month later. The courses were difficult and the discipline severe. We had been warned about this and were told it was necessary in order to teach us in three months what it took four years to learn at the Naval Academy. We had exams and tests every week, and every week, two to five members of our company disappeared. Of 140, 71 graduated and only about 50 were designated for flying. Fifteen of us went to the primary flight station in Miami.

When we arrived, we were assigned to bunks and barracks, told to familiarize ourselves with the station, and to report to the bull pen for flight the following day. The bull pen was a flat wooden square platform with plank benches all around the rail, situated about 25 yards from the planes on the beach. Students and pilots went there for assignment, to wait for a plane, or to just wait. The afternoon we arrived most of us went there to watch the planes coming and going. An F Boat was turning for landing and when an instructor stood up and said, "He's flying too flat," we all stood to watch. He was about 100 feet up on his final when the plane stalled and went headfirst into the bay, about 75 feet offshore. All of us rushed to the beach and swam out to the plane. Two men held the pilot's head above water while the rest lined up along the wing and lifted the plane about a foot. The impact had torn the engine free and it had struck the pilot on the head, tearing his helmet off and cutting his scalp. The pilot was George Evans, a classmate of mine from Philadelphia. He died that night.

In 1918 flying was still a minor miracle. Everything was experimental and highly unreliable. Propellers were inefficient and trained mechanics nonexistent. Engineers knew the theory of flight, mainly that at least two-thirds of the lift of the airfoil was generated by the top curve of the wing. Drag and speed took the engineers into other areas of trial and error. We called the planes "kites," because at altitude they looked like they were tied on a string. Propellers were "clubs." You can imagine why.

The resume of accidents report,next page, signed by Colonel C. St. John Culbertson, Royal Flying Corps, helps describe the general atmosphere at the time. It was dated December 1917.

Our performance wasn't much better. In Miami we had four or five crashes each month, and one out of four killed the pilot. Crashes, casualties and trouble were expected.

My personal log records 7 engine failures, 10 forced landings and 2 minor crashes. In addition, I was assigned three planes that would not fly – because of faulty rigging or engines that did not deliver full power. We flew full throttle all the time because our trainers had about a 5 to 10-mile speed band between top speed and stall. Stalls were dangerous. The wings would quit flying, just let go all at once, and the plane would nose straight down. You required at least 500 feet of fall before you could regain control and get level. If you were in a turn and stalled into a spin, you needed 1,500 feet. All of our landings were "dead stick" in order to train us for forced landings, which

Resume of Accidents

Avoidable Accidents –

1. There were six *avoidable* accidents this month.

   a. The pilot of a *Shorthorn*, with over seven hours of experience, seriously damaged the undercarriage on landing. He failed to land at as fast a speed as possible as recommended in the Aviation Pocket Handbook.

   b. A B.E. 2 stalled and crashed during an artillery exercise. The pilot had been struck on the head by the semaphore of his rear seat observer who was signaling to the gunners.

   c. Another pilot in a B.E. 2 failed to get airborne. By an error of judgment, he was attempting to fly at midday instead of at the recommended best lift periods which are just after dawn and just before sunset.

   d. A *Longhorn* pilot lost control and crashed in a bog near Chipping-Sedbury. Lack of skill on the part of the pilot in not being able to control a machine with a wide speed band of 10 mph between top speed and stalling speed.

   e. While low flying in a *Shorthorn*, the pilot crashed into the top deck of a horse-drawn bus near Stonehenge.

   f. A B.E. 2 pilot was seen to be attempting a banked turn at a constant height before he crashed. A grave error by an experienced pilot.

Unavoidable Accidents

2. There were 29 unavoidable accidents from which the following are selected:

   a. The top wing of a *Camel* fell off due to fatigue failure of the flying wires. A successful emergency landing was carried out.

   b. Sixteen B.E. 2s and nine *Shorthorns* had complete engine failures, a marked improvement over the November figure.

   c. Pigeons destroyed a *Camel* and two *Longhorns* in mid-air strikes.

Cost of Accidents

Accidents during the last three months of 1917 cost 317 pounds, 10 shillings, sixpence, money down the drain and sufficient to buy new gaiters and spurs for each and every pilot and observer in the Service.

Flying Safety Tips

Crash Precautions

Every pilot should understand the serious consequences of trying to turn with the engine off. It is much safer to crash into a house when going forward than to sideslip or stall a machine with engine troubles.

Passengers should always use safety belts, as the pilot may start stunting without warning. Never release the belt while in the air or when nosed down to land.

Engine Noises

Upon the detection of a knock, grind, rattle or squeak, the engine should be at once stopped. Knocking or grinding accompanied by a squeak indicates binding and lack of lubricant.

Horizontal Turns

To take a turn, a pilot should always remember to sit upright, otherwise he will increase the banking of the aeroplane. He should *never* lean over.

came often. We never flew in bad weather. There was no oral communication, plane to ground.

Artillery spotting planes used a key-operated wireless telegraph for Morse code. They did not have a receiver. There were no semaphores with which to strike the pilot. When we qualified for aerobatics, such as they were, we were given this message from Captain Marc Mitscher, "No one knows much about flying – if you think you can do something and want to risk your life taking a chance on it, the Navy will take a chance with the equipment." He also said, "I like lucky pilots. They must be resourceful."

Advanced flying at Pensacola included gunnery and bombing practice, more navigation, training on the large twin-Liberty-motored boats and, finally, night flying.

On solo flights we were supposed to circle in the pattern and land three times on the bay, opposite the flight officer on the beach. During one solo, when I took off I was a little over halfway around the first turn when the motor sneezed and balked. I had to land. I thought the carburetor jets were clogged since the motor was idling smoothly. I opened the throttle wide and closed it a number of times to blast the sediment out of the jets. The motor turned up to speed, so I took off. The same thing happened the second time. I tried again, and came down the third time. I was now about 10 miles from the station. I got out on the pontoon and checked the gas line. Everything was in order. I looked at the front cockpit gauges. The air pressure gauge on the gas tank showed only two pounds; the pump on the motor was supposed to keep it at nine. There was a hand pump in the front cockpit, so I got in and, by continuous use of the hand pump, I kept enough pressure on the tank to keep going. When I arrived back at the station, I had been missing 30 minutes. The flight commander was waiting and angry. He said, "Have you been stunting this plane so that you fell out of the back seat into the front cockpit? Where the hell have you been?" When I explained, he smiled and qualified me.

(to be continued)

Letters

Kudos

Congratulations tall as the stars and wide as the Milky Way galaxy! JOCS Bill Bearden's article on "Alternate Fuel" in *Naval Aviation News*, September 1979, is superb!

His clear-eyed, level-headed approach to the subject makes the material especially worthwhile. I have been teaching physics some 30 years, and this is the best article on shale oil I've seen.

And my congratulations to the editor for the dynamic cover, showing the sun – the source of almost all our energy.

You may be sure I'll be using this article, the cover picture and the wonderful information in *Naval Aviation News* in my lectures.

John M. Scott, S.J.
Creighton University
Omaha, Neb. 68178

I don't usually write letters to the editor, even though I know how welcome they are, but I had to comment on JOCS Bearden's "Saga of Ferp, Farp and Fip" *(NANews*, September 1979) – a masterpiece of communication. I hope the gang from Somewhere doesn't chase down his Getmethere to see if it's running on Ferp or Farp. Seriously, it is the best piece I have seen on the whole energy problem and, goodness knows, every journalist has taken a crack at it.

Olive Hearon
Editor, *CAMPUS* magazine
Chief of Naval Education and Training
NAS Pensacola, Fla. 32508

British Museum

An exhibition on Flt. Sub. Lt. R.A.J. Warneford V.C. at the Fleet Air Arm Museum will open to the public in October 1979.

We are seeking the loan of any memorabilia connected with Rex Warneford for possible inclusion in the exhibition. Anyone who may have known him or have items of interest connected with him they would like to contribute contact the Curator, Fleet Air Arm Museum, Royal Naval Air Station Yeovilton, Somerset, England BN22 8HT.

We Stand Corrected

The June 1979 *Naval Aviation News*' "Naval Aircraft" contains incorrect information. The T-29Bs which were obtained from the Air Force for Navy navigation training were flown by VT-29 at NAS Corpus Christi, Texas, and not by VT-28.

In addition, you state that "...navigation training was taken over by the Air Force." This command has 12 Navy instructors who teach at this interservice undergraduate navigation training program. All U.S. military services as well as many of our allies use the Air Force training facilities and T-43A aircraft, but this is most definitely an interservice operation!

G. A. Wells
Naval Air Training Unit
Mather AFB
Sacramento, Calif. 95655

F-8 Drivers

I have been commissioned to write a book about the F-8 *Crusader* series. This book will cover all phases of F-8 operations from 1955 to the present, with strong emphasis on in-flight experiences.

I would like to hear from Navy and Marine Corps pilots, past and present, who flew variants of the F-8 series.

Peter Kilduff
7 Woodbine Street
New Britain, Conn. 06052

ASW

I am an S-3A *Viking* sensor operator gathering material for a book. I have written letters to all operational VS squadrons and am now turning to past, present and future operators for information on the AF *Guardian*, S-2 *Tracker* and S-3 *Viking*. I need action or still photographs, historical and operational data. Any materials received will be returned and all correspondence answered. Any material used will be properly credited.

Since ASW is recognized as a vital necessity, I hope my book will bring some measure of recognition to those who spend long hours searching for the hidden menace and protecting our shores from the threat from under the sea.

Michael C. Maule, AW2
VX-1
NAS Patuxent River, Md. 20670

Managing Editor Retires

A familiar name is missing from this month's masthead. After 14 years on the staff of *Naval Aviation News*, 10 of those years as managing editor, Dorothy Bennefeld has retired.

Dorothy's expertise and editorial eye have played a critical role in maintaining the excellent reputation the magazine enjoys. Upon her retirement, she received the Navy Meritorious Civilian Service Award, one of the highest given to civilian government employees, testifying to her achievement over the years.

We extend our best wishes as Dorothy and her husband, Les, prepare to make their new home in California.

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Air Antisubmarine Squadron 38 evolved from Composite Squadron 892, a naval reserve unit. Activated at Seattle, Wash., in July 1950 to meet the needs of the Korean Conflict, VC-892 was redesignated VS-892 two weeks later and subsequently transferred to its present home at NAS North Island. In February 1953, it became VS-38. Today, the squadron flies S-3A Vikings under the leadership of Commander Donald W. Baird.

SQUADRON INSIGNIA

The squadron motto "Cum Grano Salis" stemmed from the VS-892 reservists' concern about leaving their civilian pursuits and going into active service. They answered the call to arms "with a grain of salt." The shield's bright and dark background represents night and day tasks. The sword indicates the power to strike both above and below the sea's surface, and the three weather symbols show the squadron's all-weather capability. Grasping the submarine is a griffin from Greek mythology — the lion half indicates the strength of the ASW striking power; the eagle half symbolizes the airborne source of that power.


Naval Aviation news
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OFFICERS' MES
Naval Air Station
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CLOSE COVER BEFORE STRIKING
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